

# Asymptomatic non-specific urethritis

P. RODIN

*Department of Venereology, The London Hospital*

Non-specific urethritis is without doubt the commonest form of urethritis in men. The reported figures of cases of non-gonococcal urethritis for England and Wales, since they were first recorded separately in 1951, have steadily increased from 10,794 to 35,721 in 1968 (Department of Health and Social Security, 1969). The majority of these cases of non-gonococcal urethritis are non-specific in nature. It is a common impression that the diagnosed cases of non-specific urethritis (NSU) are likely to represent only the tip of the iceberg, as it is well known that the condition can be mild and asymptomatic. Although NSU may be found on routine examination in asymptomatic patients who attend holding their urine for variable times, milder cases may be detected only after the patient has held his urine overnight. The present investigation was designed to estimate the incidence of asymptomatic NSU found by early morning examination in men attending a venereal disease clinic.

## Patients and methods

A series of 88 white British men was examined. Only patients who had neither present nor past symptoms of urethritis or cystitis were included. Most of them attended asking for a 'check up', but nine denied ever having had sexual intercourse or even genital contact and attended for various reasons, such as prominent coronal papillae or guilt over masturbation. Their ages ranged from 16 to 60 years, 67 being aged between 16 and 30 years. There was no evident urethral discharge at the initial examina-

tion and the 2-glass test of voided urine was clear in both glasses except for an occasional thread in the first glass in a few cases.

These patients were examined again the following morning having held their urine overnight. The urethral meatus and fossa navicularis were cleaned with normal saline, and the urethra was then massaged from the bulb distally. A smear was made of any urethral material so obtained and was stained by Gram's method. Only if the smear contained many polymorphonuclear leucocytes in several one-twelfth microscopic fields with no or few organisms was the diagnosis of non-specific urethritis considered. Any epithelial cells present were mostly non-squamous in type, supporting their origin proximal to the fossa navicularis. All except one of the smears considered to be positive contained 50 to 100 polymorphonuclears in several fields; the remaining smear showed about 30 in several fields. *Trichomonas vaginalis* was looked for in moist urethral scrapings in the cases with evidence of urethritis, but was not found in any instance.

## Results

As judged by the above criteria, eleven of the 88 men (12.5 per cent.) were found to have non-specific urethritis. In four of these eleven the test was repeated within the next few days with similar results. Further details regarding marital status and recent sexual intercourse are given in the Table.

Patients with positive findings were aged 18 to 40 years. Seven of those with negative findings had recently had intercourse with prostitutes compared with four of those found positive. The one patient with positive findings who had not had intercourse in the last 3 months did admit to having had it 5

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TABLE *Marital status and history of extramarital intercourse within previous 3 months*

Result		Marital status			
		Single	Married	Divorced or separated	Total
Negative	Total	56	17	4	77
	Extramarital intercourse	36	13	4	53
Positive	Total	9	1	1	11
	Extramarital intercourse	8	1	1	10

months before attending. Of the 77 patients with negative findings 27 were circumcised compared with four of the eleven infected patients.

Seven of the eleven infected patients had a definite urethral discharge on early morning examination, but in four the urethral secretion was judged as not being in excess of normal. Five of the infected cases had threads in the first glass of the 2-glass test, and smears of these threads showed them to contain many polymorphonuclear leucocytes as well as mucus. Two others had a hazy urine in the first glass and the centrifuged deposit showed many polymorphs. The remaining four infected patients had only a few specks in the first glass; the centrifuged deposit in one of these showed numerous polymorphs but in the other three only occasional cells were seen. Two patients had neither excess urethral secretion nor abnormalities in the urine, so that the diagnosis would not have been possible without a routine smear of the urethral secretion being made, whether there was obvious discharge or not.

Three of the patients with negative findings had a slight discharge; in two the smear showed mucus and epithelial cells and in the other many sperms. Nine had threads in the first glass of the 2-glass test, but these were usually few in number and mostly smaller than in the positive cases. Except in the cases of two patients, smears showed that the threads contained only occasional polymorphs and much mucus. Six other patients had slightly hazy urine in the first glass but the centrifuged deposit showed copious mucus and only occasional cells. One patient had hazy urine in both glasses because of the presence of spermatozoa.

## Discussion

Although patients attending a venereal diseases clinic cannot be said to be truly representative of the general population, there must be many men to-day leading equally active sex lives who do not attend these clinics. If 12·5 per cent. of the patients in this study are accepted as having asymptomatic NSU on the basis of the early morning smear and urine findings, then the true incidence of this condition must be grossly in excess of the reported numbers. Grimble and Csonka (1955) state that some cases with minimal signs may not, in fact, be true instances of NSU, the signs being due merely to increased secretions in an otherwise normal genital tract. However, most patients with initially obvious NSU later go through a phase when evidence of urethritis is found only by examining the overnight secretion and at this stage many are asymptomatic.

In practice the more carefully one examines patients after treatment of NSU, the more often a mild residual asymptomatic urethritis is found and the less often is one surprised when overt relapse subsequently occurs. It would seem probable that some cases are mild and asymptomatic from the start and are able to be found only by careful examination. King (1964) went so far as to say that any individual who is habitually promiscuous is likely to show signs of this condition on expert examination, even though he has no symptoms and is unaware of any problem. The final proof of the significance of these findings will depend on showing the presence or absence of the aetiological agent or agents of NSU in these cases. In controlled studies of possible causative agents, such as *Chlamydiae*, it must be recognized that an asymptomatic group may well contain men who would show evidence of urethritis on examination of the overnight urethral secretion.

## Summary

Evidence of non-specific urethritis was found in eleven (12·5 per cent.) of 88 asymptomatic men attending a venereal diseases clinic. This infection was not detected at the initial attendance, but only when the overnight urethral secretion was examined. It is likely that the true incidence of non-specific urethritis is much greater than is indicated by the reported figures.

## References

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## Urétrites non gonococciques asymptomatiques

### SOMMAIRE

La présence d'urétrites non gonococciques fut prouvée parmi 11 hommes (12,5 pour cent) sur 88, sans symptômes, consultant dans une clinique vénéréologique. La maladie ne fut pas détectée à la première consultation mais seulement quand la sécrétion urétrale fut examinée le lendemain matin. Il est probable que l'incidence réelle des urétrites non gonococciques est beaucoup plus grande que ne l'indiquent les chiffres publiés.